

# Based on our trial, the four most promising fruits are...



**Aronia** (*Aronia melanocarpa*), also known as “chokeberry,” is native to eastern North America. It has been used as an edible landscape plant but virtually ignored as a fruit crop in this country.

Aronia fruit is blueberry sized with a deep purple color. It is extremely

rich in antioxidants, with anthocyanin and flavonoid levels over five times higher than those found in cranberries. Preliminary studies have shown that Aronia may prevent colorectal cancer and cardiovascular disease.

Raw Aronia fruit has an astringent flavor that many people find unpleasant. It is delicious in juice, wine, jam, jelly and baked goods.

The two varieties of Aronia grown in the Carandale test plot have shown a high level of disease and insect resistance. This makes Aronia a good choice for sustainable and organic production.

While the economic potential for **European Black Currants** (*Ribes nigrum*) is virtually untapped in the United States, 800,000 metric tons of black currants are grown across Europe each year. Black currants were popular here until Congress banned their production in 1911 because they can spread white pine blister rust. This ban



shifted to state jurisdiction in 1966, and Wisconsin, has since legalized production.

Some varieties of black currants have four times the Vitamin C of oranges, twice as much potassium as bananas, and twice the antioxidants found in blueberries. They may protect against Alzheimer’s disease and prevent urinary tract infections.

Black currants are used in juice, jam, jelly, syrup and other products. While they have a somewhat astringent taste, many people enjoy eating them raw.

Although European Black Currants are somewhat disease prone, continued plant selection will result in disease-resistant cultivars.

**Sea berry** (*Hippophae rhamnoides*), also known as sea buckthorn, is grown across Europe and Asia. Other varieties are native to the Himalayas.

This shrub produces orange berries that are rich in Vitamins A, C and E. Sea berries contain more vitamin C per serving than oranges, strawberries and kiwis. The berries are rich in oil that contains Omega-3 fatty acids and is used medicinally in parts of Asia.

Harvesting sea berries is challenging because the fruit is surrounded by large thorns. The branches are often cut off and frozen, as the frozen fruit shakes off easily. This method limits harvesting to once every two years, however. The fruit can also be harvested mechanically, and Carandale Farm is testing different



cultivars for their mechanical harvesting potential.

Sea berry is used in juice, beer, wine, sauces and jam. While the raw fruit is tart, many people find it tasty. The tartness is reduced by frost and cooking.

This shrub exhibits vigorous root growth that can protect against soil erosion. It can tolerate a wide range of soil types, pH, fertility, and moisture.



**American Elderberry** (*Sambucus canadensis*) is native to North America. For centuries, both Native Americans and Europeans have used elderberry to treat colds, flu, and other ailments. Native Americans used crushed elderberry leaves as an insect repellent and crafted flutes from its stems.

The elderberry shrub produces large white flowers and dark purple berries. Elderberries are loaded with antioxidants, specifically the anthocyanins that provide their color. While the flowers and berries are edible, other parts of this plant are toxic if ingested.

Raw elderberries are not particularly tasty, but they are delicious when cooked or dried. The berries are used in baked goods, preserves, juice and wine.

The elderberry shrub tolerates both cold and drought, grows in most soil and drainage conditions, and resists diseases and pests, which makes it a good addition to organic and sustainable farming systems.

## Carandale's Fruit Trial

Carandale Farm has been growing fruit for over thirty years. During this time, our customers' values have shifted from an emphasis on low prices to a desire for convenient, locally grown, healthy food.

To increase the diversity of locally grown fruit, we have established an extensive on-farm trial to learn what non-traditional fruit crops can be sustainably grown and marketed locally. Our three-acre test plot includes over 500 plants representing over 100 cultivars of 42 fruit crop species. We are evaluating fruit varieties for horticultural suitability, pest and disease issues, marketing potential, and their potential for becoming invasive species.

This trial emphasizes fruits that are known to have or are suspected of having high levels of antioxidants and other compounds that protect against cancer and other diseases—also known as nutraceutical value. Much of this fruit has been used for its health enhancing properties for centuries.

Of the many cultivars and species tested in our plot, Aronia, Elderberry, Sea Berry and European Black Currant (described inside this brochure) show the most promise for sustainable production in southern Wisconsin. Saskatoon, Red Currant, Gooseberry and Aronia-Ash Cross also show potential, but require further testing. Other fruits of interest include Cornelian Cherry, Honeyberry, Russian Quince, Fruiting Rose and Mulberry.



## About Carandale Farm

Carandale farm is the largest and longest established pick-your-own farm in Dane County. We are easy to find, but far enough away that sights and sounds of suburbia are replaced by wildlife, rolling hills and woodlands.

Our mission is:

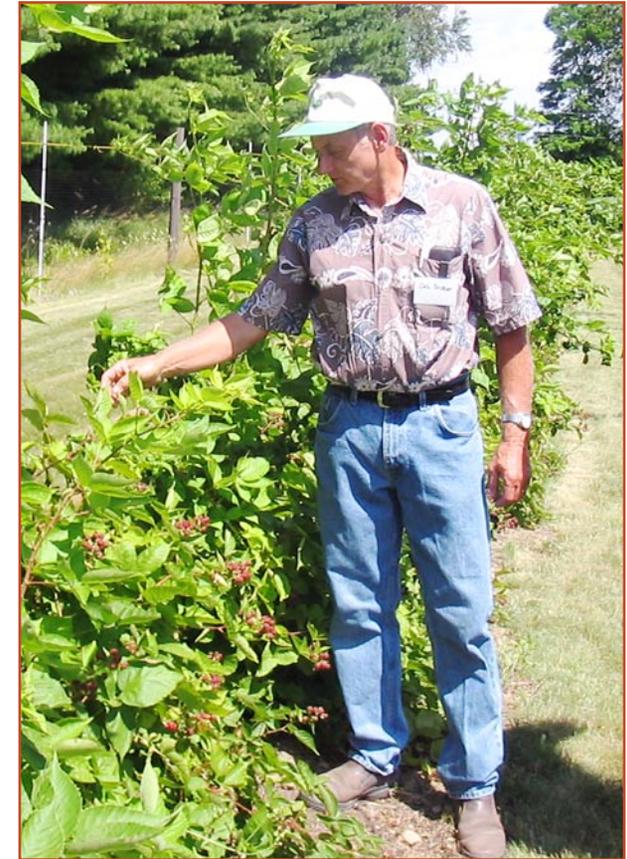
- To provide our customers with safe, nutritious fruit grown in an environmentally conscientious manner,
- To provide a relaxed and friendly atmosphere where people can enjoy a personal experience in a natural setting, and
- To provide our young people with an educational experience and an appreciation of nature.

We use Integrated Pest Management (IPM), which minimizes or eliminates pesticide application through maximizing sunlight, air and water drainage in our fields, removing diseased foliage, planting resistant varieties, and preserving natural predators.

We sell much of our produce right from the farm, both pre-picked and pick-your-own. We also attend the Dane County Farmers' Market. In the fall, we supply apples to several school lunch programs.

For more information about our farm, visit [www.carandale.com](http://www.carandale.com).

# Uncommon Fruits at Carandale Farm



Fruit trials at Carandale Farm were sponsored by an Agricultural Development and Diversification (ADD) grant from the Wisconsin Department of Agriculture, Trade and Consumer Protection.